

CLAIMS

1. A process for preparing asparagine-linked oligosaccharide derivatives including the steps of: (a) treating a delipidated egg yolk with a protease to obtain a mixture of peptide-linked oligosaccharides, (b) treating the mixture of peptide-linked oligosaccharides with a peptidase to obtain a mixture of asparagine-linked oligosaccharides, (c) introducing a lipophilic protective group into the asparagine-linked oligosaccharides in the mixture to obtain a mixture of asparagine-linked oligosaccharide derivatives, and (d) subjecting the mixture of asparagine-linked oligosaccharide derivatives to chromatography to separate the mixture into individual asparagine-linked oligosaccharide derivatives.

2. A process for preparing asparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the delipidated egg yolk is obtained by delipidating an avian egg yolk with an organic solvent.

3. A process for preparing asparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the asparagine-linked oligosaccharide derivatives are asparagine-linked undeca- to pentasaccharide derivatives.

4. A process for preparing asparagine-linked oligosaccharide derivatives as defined in claim 3 wherein the asparagine-linked oligosaccharide derivatives are asparagine-linked undeca- to heptasaccharide derivatives.

5. A process for preparing asparagine-linked oligosaccharide derivatives as defined in claim 4 wherein the asparagine-linked

oligosaccharide derivatives are asparagine-linked undeca- to nona-saccharide derivatives.

6. A process for preparing asparagine-linked oligosaccharide derivatives as defined in claim 5 wherein the asparagine-linked oligosaccharide derivatives are asparagine-linked undecasaccharide derivatives.

7. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the lipophilic protective group is a carbonate-containing group or acyl group.

8. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 7 wherein the lipophilic protective group is a carbonate-containing group.

9. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the lipophilic protective group is Fmoc group or Boc group.

10. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 9 wherein the lipophilic protective group is Fmoc group.

11. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the asparagine-linked oligosaccharides contained in the mixture of asparagine-linked oligosaccharides obtained by the step (b) are hydrolyzed before the subsequent step to cut off some sugar moieties.

12. A process for preparing sparagine-linked oligosaccharide derivatives as defined in claim 1 wherein the asparagine-linked oligosaccharide derivatives contained in the mixture of asparagine-linked oligosaccharide derivatives obtained by the step (c) are hydrolyzed before the subsequent step to cut off some sugar moieties.